

REMARKS

Applicants thank the Examiner for the thorough consideration given the present application.

Claims 1-6 and 8-17 are currently being prosecuted. The Examiner is respectfully requested to reconsider his rejections in view of the amendments and remarks as set forth below.

Claim for Priority

It is gratefully acknowledged that the Examiner has recognized Applicants' claim for foreign priority. In view of the fact that Applicants' claim has been perfected, no additional action is required from the Applicants at this time.

Drawings

It is noted that the Examiner has objected to the drawings and required that lines 72 and 73 be deleted between Figs. 7C and 7D. By way of a separate letter requesting approval of drawings changes, Applicants are making this change. Accordingly, Applicants request that the Examiner accept the corrected drawings for examination purposes.

It is also noted that the Official Draftsperson has not approved the formal drawings. It is respectfully submitted that the drawings comply with the requirements of the U.S. Patent and Trademark Office. If the Official Draftsperson has any objections to the formal

drawings, he is respectfully requested to contact the undersigned as soon as possible so that appropriate action may be taken. No further action is believed to be necessary at this time unless the undersigned receives a Notice from the Official Draftsperson.

Acknowledgment of Information Disclosure Statement

The Examiner has acknowledged the Information Disclosure Statement filed November 17, 2000. An initialed copy of the PTO-1449 Form has been received from the Examiner. No further action is necessary at this time.

Objections to the Specification

The Examiner objected to the Specification because the phrase "the present invention" makes it appear as if this application is being referred to. Applicants disagree with the Examiner and have not changed this phrase. It should be noted that while the Related Art is being described, that Figs. 8 and 9 of the present specification have copied the Related Art device. Accordingly, the phrase at issue is proper and has not been changed.

The Examiner required a change to page 8, which has been accomplished. Applicants have also corrected 3 other obvious errors in the specification.

Claim Objections

The Examiner objected to claims 4 and 9, as not have preambles consistent with the independent claims they depend from. This has now been corrected.

The Examiner also rejected claims 15-17 for similar reasons. This has also been corrected.

Rejection under 35 USC §112

Claims 3, 4, 14 and 15 have been rejected under 35 USC §112 as being indefinite. This rejection is respectfully traversed. By way of the present amendment, these four claims have been modified to describe that there is one part of the L-shaped body which is parallel to as to avoid any conflict in the independent claims 1 and 12.

In regard to claim 8, the indefinite article has now been utilized to avoid this problem.

Rejection under 35 USC §102

Claims 1, 2, 12 and 13 stand rejected under 35 USC §102 as being anticipated by Emmitt (US Patent 5,249,556). This rejection is respectfully traversed. Applicants submit that the Examiner has misunderstood the reference and does not show the features claimed in the present application.

The Examiner refers to Fig. 11 and describes cylindrical relief valve 28, 29 and 30 as being disposed in parallel to main gallery 11.

The reference does show in Fig. 9 and describe in column 5, lines 15-28 the pressure relief valve parts 28-30. Unfortunately, this reference apparently utilized the same reference numbers for different parts in different figures. Thus, reference numerals 28-30 are used to describe a different apparatus in Figs. 10-22. This is clearly seen in column 5, lines 47 and 48 where reference numeral 28 refers to a duct, reference numeral 29 refers to crankshaft duct and reference numeral 30 refers to a branch duct. The structure shown on the right side of Fig. 11 and identified as reference numeral 28 and 29, are not the pressure relief valve, but rather are ducts for carrying the oil. Thus, there is no showing in Fig. 11 of a cylindrical relief valve at all and more particularly not a valve parallel to the main gallery. A pressure relief valve is apparently seen in Figs. 19 and 20 as described in column 7, lines 45-48. However, this relief valve is clearly not parallel, but rather perpendicular to the main gallery and crank shaft.

Claims 1 and 12 are directed to a combination of elements wherein the relief valve is disposed parallel to the main gallery and crank shaft. The Emmitt reference does not show such a feature. Thus, Applicants submit that this rejection is overcome.

Claim 7 stands rejected as being anticipated by Takashi et al. (US 5,778,848). This rejection is now moot due to the cancellation of claim 7.

Claim 11 stands rejected as being anticipated by Matsuto et al. (WIPO 99/14109 or US 6,158,543). This rejection is respectfully traversed. Claim 11 was originally incorrectly worded as an independent claim. By way of the present amendment, Applicants have added the proper dependencies so that this claim now depends on claim 9. Accordingly, this rejection is also overcome.

Rejection under 35 USC §103

Claims 3-5 and 14-16 stand rejected as being obvious over Emmitt in view of Yamanaka et al. (US 4,638,856). This rejection is respectfully traversed. Applicants submit that the Examiner has misunderstood these references and that accordingly the features of the invention are not shown.

As discussed above, the Emmitt reference does not show a relief valve in Fig. 11, which is parallel to the main gallery.

The Examiner relies on the Yamanaka et al. reference to show a generally L-shaped relief valve and refers to the short pipe as reference numeral 57b. Applicants submit that this is not a proper reading of the reference. Channel 57b is formed in the mounting, and is not part of the relief valve. The relief valve itself is

cylindrical and extends in the vertical direction of Fig. 1 and has no L-shaped or short pipe. Rather, the flow channel 57b described is beyond the relief valve and part of the overall mounting portion.

Accordingly, Applicants submit that first the Emmitt reference does not show the parallel arrangement and secondly that the Yamanaka et al. device does not show the L-shape as suggested by the Examiner. Accordingly, Applicants submit that the features of claims 3-5 and 14-16 are not shown by either of these references or their combination.

Claims 6 and 17 stand rejected as being obvious over Emmitt in view of Matsuto et al. Applicants submit that even if Matsuto et al. teaches the use of a strainer, that these claims would still be allowable based on their dependency from allowable independent claims. Accordingly, this rejection is also believed to be overcome.

Claims 8-10 stand rejected as being obvious over Takahashi et al. in view of Yamanaka et al. This rejection is respectfully traversed. The Examiner relies on Takahashi et al. to show a relief valve in an oil tank. The Examiner relies on Yamanaka et al. to show the L-shaped relief valve. As discussed above, Applicants submit that the Yamanaka et al. reference does not show an L-shaped body of a valve and accordingly this feature is not taught by the combination of the references. In view of this, Applicants submit that claims 8-10 are also allowable.

No Prosecution History Estoppel

Claims 1, 7 and 12 are hereby presented in independent form. No prosecution history esptoppel is applied to the interpretation of the limitations set forth in claims 1, 7 and 12 and the claims that depend therefrom in view of the fact that this subject matter has been continuously presented since the original filing date of the present application.

Conclusion

In view of the above remarks, it is believed that the claims clearly distinguish over the patents relied on by the Examiner either alone or in combination. In view of this, reconsideration of the rejections and allowance of all the claims are respectfully requested.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Robert F. Gnuse (Reg. No. 27,295) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Attached hereto is a marked-up version of the changes made to the application by this Amendment.

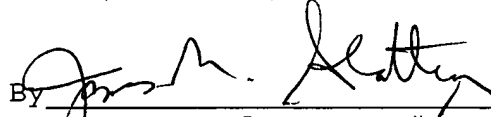
If necessary, the Commissioner is hereby authorized in this, concurrent, and further replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees


Appl. No. 09/714,144
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required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly,
extension of time fees.

Respectfully submitted,

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 JMS/RFG/ndb
0505-0714P
Attachment

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION:

Please replace the paragraph beginning on page 1, line 3, with the following rewritten paragraph:

-- The present invention relates to a lubricating apparatus for a dry sump type engine. In particular, the present invention relates to a lubricating apparatus for a dry [dump] sump type engine for use in a small-sized boat.--

Please replace the paragraph beginning on page 8, line 19, with the following rewritten paragraph:

-- Referring to Figure 4, the lubricating apparatus for the dry sump type engine includes the engine 20, an oil pump 40 provided on the engine 20, an oil tank 50 connected to the oil pump 40, an oil filter 60 mounted to the oil tank 50. Furthermore, pipes connecting the above members to each other [is] are provided.--

Please replace the paragraph beginning on page 13, line 9, with the following rewritten paragraph:

-- One end 28b1 of the valve body 28b is closed. In a normal state, the closed end 28b1 is kept in a contact state with the stopper 28c by a biasing force of the spring 28d. If hydraulic pressure in the main gallery 26, which is raised to a specific [valve] value or more, is

applied to the closed end 28b1, the closed end 28b1 is slid rightwardly in Figure 6(a) against the biasing force of the spring 28d.--

Please replace the paragraph beginning on page 18, line 12, with the following rewritten paragraph:

--One end 28b1 of the valve body 28b is closed. In a normal state, the closed end 28b1 is kept in the contact state with the stopper 28c by a biasing force of the spring 28d. If hydraulic pressure in the oil supply passage 52, which is raised to a specific [valve] value or more, is applied to the closed end 28b1, the closed end 28b1 is slid leftwardly in Figure 7(d) against the biasing force of the spring 28d, to open the discharge port 28a3. As a result, oil is jetted (released) from the discharge port 28a3 into the oil tank 50, to keep the hydraulic pressure in the oil supply passage 52 at a suitable value.--

IN THE CLAIMS:

Claim 7 has been canceled.

The claims have been amended as follows:

3. (Amended) The lubricating apparatus for a dry sump type engine according to claim 1, wherein said relief valve further comprises:

a generally L-shaped body, [said L-shaped body being] having a longer longitudinal part parallel to said main gallery and a shorter transverse part connected at one end to and in communication with the main gallery, said L-shaped body including a discharge port formed therein;

a cylindrical valve body movably received within said L-shaped body to open and close said discharge port; and

wherein when hydraulic pressure within said main gallery becomes a predetermined value, said cylindrical valve body is operated to open said discharge port to relieve the hydraulic pressure.

4. (Amended) The lubricating apparatus for a dry sump type engine according to claim 1, wherein said relief valve further comprises:

a generally L-shaped body, said L-shaped body including a long pipe parallel to said main gallery and a short pipe;

a cylindrical valve body slidably inserted in said long pipe;

a stopper for restricting movement of said cylindrical valve body in said long pipe;

a spring for biasing said cylindrical valve body toward said stopper;

a spring stop for pressing said spring; and

a mounting portion formed integrally with said L-shaped body for mounting said relief valve to a bottom wall portion of the main gallery.

8. (Amended) [The] A lubricating apparatus for a dry sump type engine [according to claim 7,] comprising:

an oil tank; and

a relief valve provided in said oil tank;

wherein said relief valve further comprises:

a lead pipe, said lead pipe being connectable with an outlet pipe of an oil filter, said lead pipe including a discharge port formed therein;

a cylindrical valve body movably received within [said] an L-shaped body to open and close said discharge port; and

wherein when hydraulic pressure within said main gallery becomes a predetermined value, said cylindrical valve body is operated to open said discharge port to relieve the hydraulic pressure.

9. (Amended) [The] A lubricating apparatus for a dry sump type engine [according to claim 7,] comprising:

an oil tank; and

a relief valve provided in said oil tank;

wherein said relief valve further comprises:

a lead pipe, said lead pipe being connectable to an outlet of an oil filter;

a cylindrical valve body slidably inserted in said lead pipe;

a stopper for restricting movement of said cylindrical valve body in said lead pipe;

a spring for biasing said cylindrical valve body toward said stopper; and

a spring stop for pressing said spring.

11. (Amended) A lubricating apparatus for a dry sump type engine, according to claim 9, further comprising:

[an oil tank; and]

a strainer for straining oil recovered in said oil tank [is] provided in said oil tank.

14. (Amended) The dry sump type engine according to claim 12, wherein said relief valve further comprises:

a generally L-shaped body, [said L-shaped body being] having a longer longitudinal part parallel to said main gallery and a shorter transverse part connected at one end to and in communication with the main gallery, said L-shaped body including a discharge port formed therein;

a cylindrical valve body movably received within said L-shaped body to open and close said discharge port; and
wherein when hydraulic pressure within said main gallery becomes a predetermined value, said cylindrical valve body is operated to open said discharge port to relieve the hydraulic pressure.

15. (Amended) The [apparatus for a] dry sump type engine according to claim 12, wherein said relief valve further comprises:

a generally L-shaped body, said L-shaped body including a long pipe parallel to said main gallery and a short pipe;

a cylindrical valve body slidably inserted in said long pipe;

a stopper for restricting movement of said cylindrical valve body in said long pipe;

a spring for biasing said cylindrical valve body toward said stopper;

a spring stop for pressing said spring; and

a mounting portion formed integrally with said L-shaped body for mounting said relief valve to a bottom wall portion of the main gallery.

16. (Amended) The [lubricating apparatus for a] dry sump type engine according to claim 15, wherein said long pipe includes a discharge port formed therein, and wherein when said cylindrical valve

body is moved against the bias of said spring, the discharge port is opened to allow hydraulic pressure in the main gallery to be relieved.

17. (Amended) The [lubricating apparatus for a] dry sump type engine according to claim 12, further comprising:

a oil tank; and

a strainer for straining oil recovered in the oil tank, said strainer being provided in said oil tank.